

PHENIX WEEKLY PLANNING

10/12/06

Don Lynch

PHENIX Shutdown Overview

Task_Name	Start_Date	Finish_Date
PHENIX Shutdown '06	5/1/2006	12/8/2006
Pre Shutdown Tasks	5/1/2006	DONE
End of Run 6	6/27/2006	DONE
Shutdown Preparations	6/27/2006	DONE
Detector Upgrades	7/19/2006	11/30/2006
Planned electrical power outage	7/24/2006	DONE
Subsystem maint/repair tasks	7/19/2006	10/31/2006
Building and infrastructure tasks	5/1/2006	10/31/2006
E carriage roll in & setup	10/30/2006	11/17/2006
RHIC Cooldown Begins	12/1/2006	12/1/2006
Start Flammable Gas/Watch Shifts	12/5/2006	12/5/2006
Run Prep	11/20/2006	12/31/2006
Shutdown Concluded Start Physics Run	1/1/2007	1/1/2007

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- Mechanical Installation Complete
- Cables Run
- Rack Modifications complete
- Gas supply control system (mixing house) in progress
- Electronics installation in progress
- Testing and commissioning to be completed

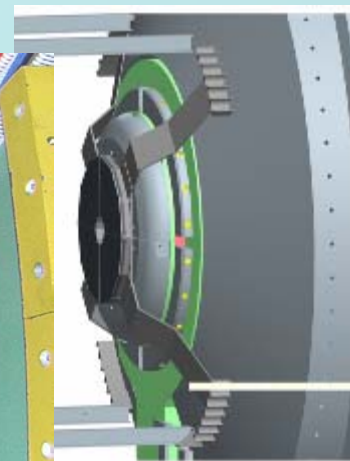
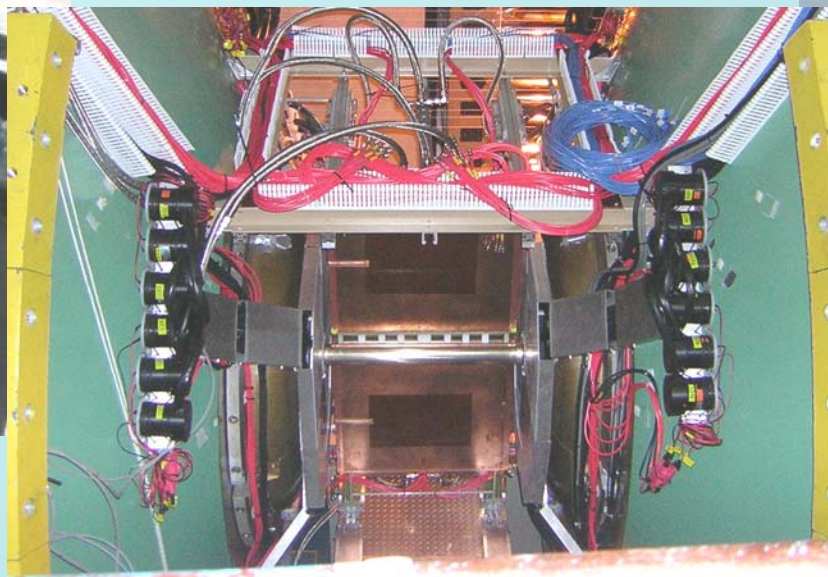


RXNP

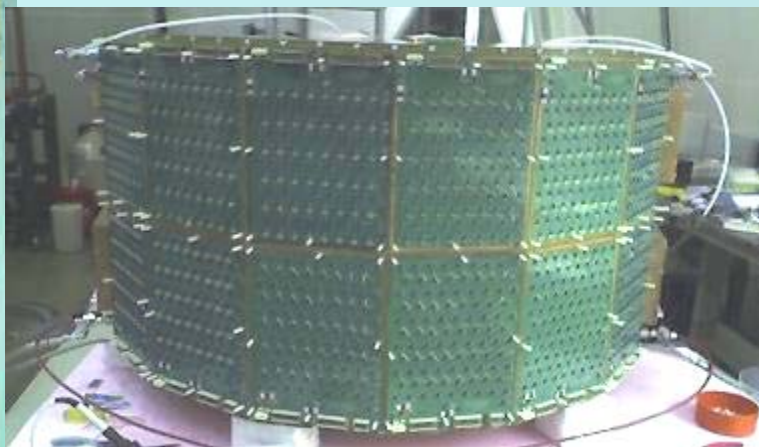
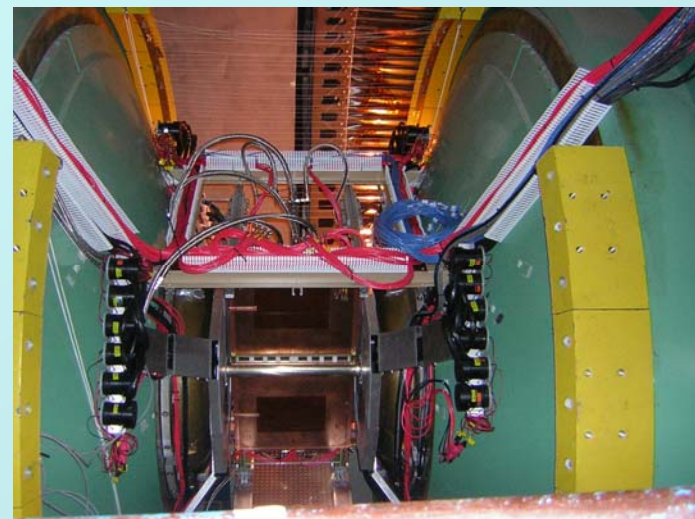
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- Mechanical installation Complete
- Cables run
- Rack plumbing, power Complete
- Electronics installation in progress
- Testing and commissioning to be completed
- LED Box installation next week



- Mechanical Installation HBD West Complete
- HBD West Cables Run
- Testing and commissioning to be completed
- HBD East now at Stony Brook due here 10/18/06; mechanical installation to be completed by 10/20/06
- Cooling & Bakeout heater systems to be installed
- Gas Hutch renovation ongoing



HBD (Hadron Blow Drier)

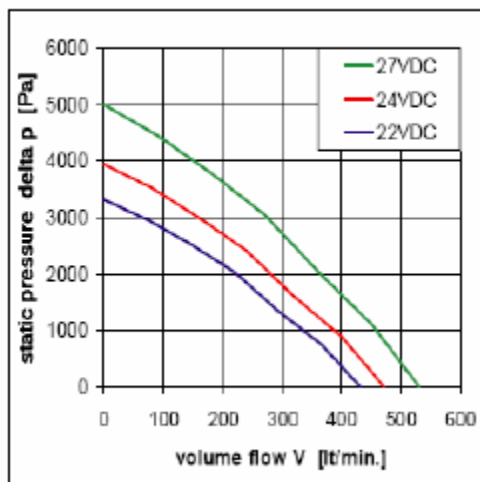
Electronics Cooling



Still Needed for Approval to Operate:

- Where will fan(s) be mounted? - CM base "cubby hole" fan model and specs to be forwarded to Safety
- Written design and operation description and- To be forwarded to Safety
- Order for 5 blowers & drivers (4 +1 spare) is in the works

U51DX-024KK-5 24VDC



Blower requirements:

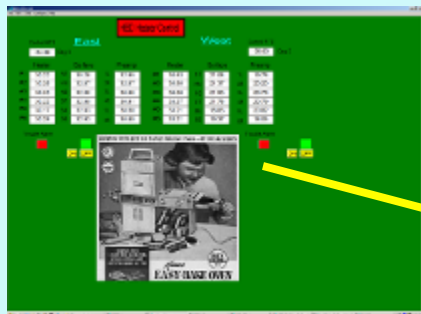
5 cfm (142 l/min)

@ 5 in WC (1245 Pa)

HBD "EBO" Heaters

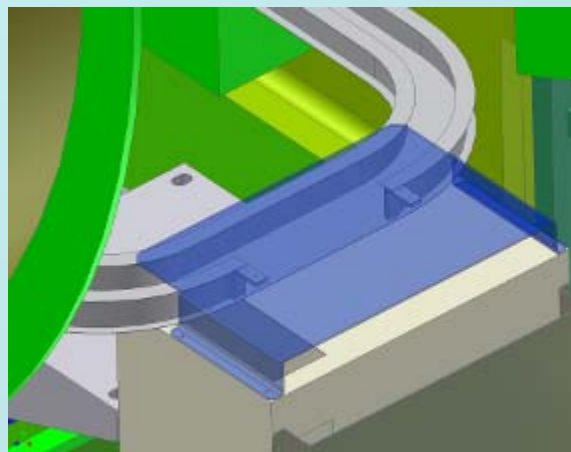
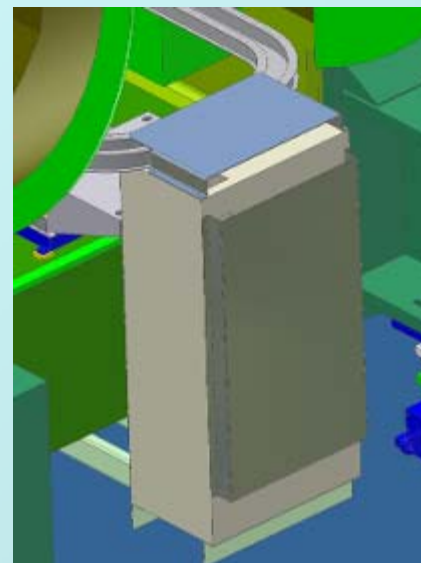
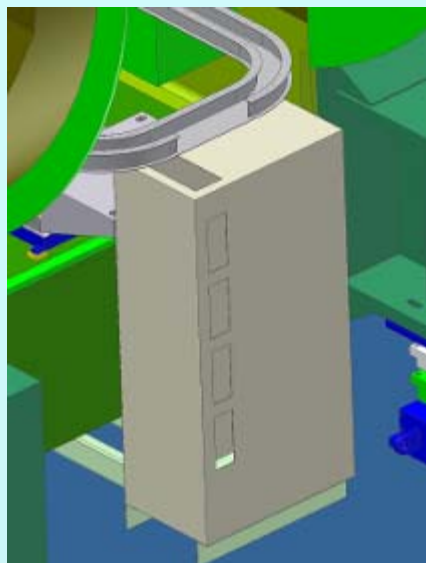
Needed for Approval to Operate:

- Report detailing design and operation- To be forwarded to Safety



HBD Signal Rack

Technical Support + 2006



Remaining Schedule

	Start	Complete
TOF West		
Electrical, modify/upgrade rack	Done	Done
Commissioning	in progress	10/31/06
RXNP		
Electrical, rack integration: water & power	Done	Done
Commissioning	in progress	10/13/06
HBD		
Electrical cables, rack integration: water & power	in progress	10/13/06
Gas Plumbing	in progress	10/13/06
East pre-survey	10/16/06	10/16/06
East mechanical installation (incl. final survey)	10/18/06	10/20/06
East cable trays	10/23/06	10/25/06
HBD preamp cooling system	9/5/06	11/1/06
HBD drying heater system	9/5/06	10/13/06
Commissioning	9/25/06	11/30/06

Remaining Schedule

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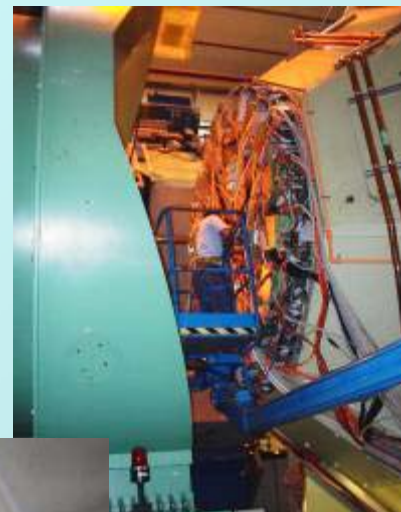
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	Start	Complete
MPC North		
Mechanical installation	Done	Done
Electrical, modify/upgrade rack	Done	Done
Commissioning	10/12/06	10/31/06
PC HV module and cable maintenance	10/24/06	10/31/06
TEC maintenance & Repairs	in progress	10/13/06
MuID survey	10/20/06	10/27/06
MuID commissioning	11/22/06	11/29/06

MPC North

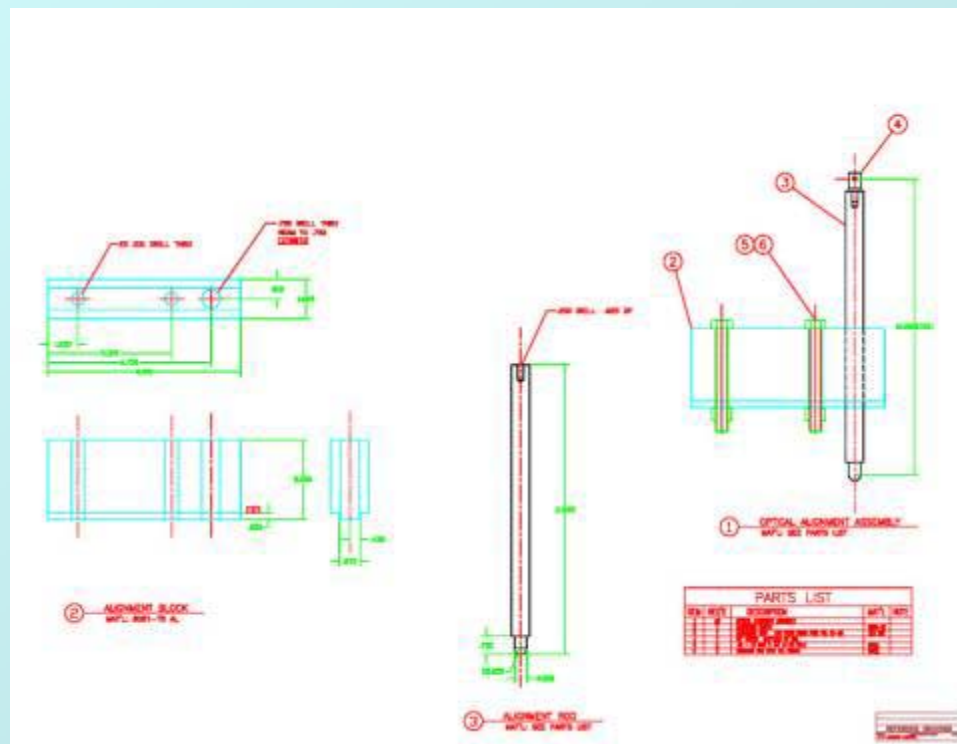
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- Mechanical Installation Complete
- Cables and Rack installed
- Testing and commissioning in progress
- Move the CM 10/16...no more access to the crystals until Shutdown 2007



Subsystem Maintenance & Repairs

- PC HV module/cable maintenance later this month
- TEC upgrades on going
- MuID survey/commissioning next month



Infrastructure Work

CAD/RHIC PHENIX infrastructure related mechanical and electrical support

Roof leak repairs

MuID survey

EMCal Survey

1008-wide Door latch repairs for security

EC and Shield wall C-A support

LN2 Tank Stencilling

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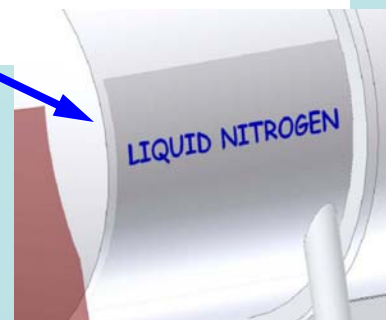
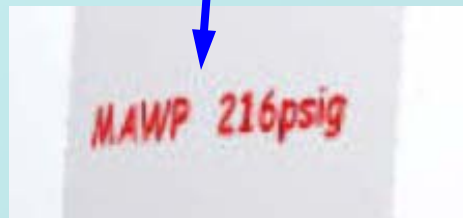
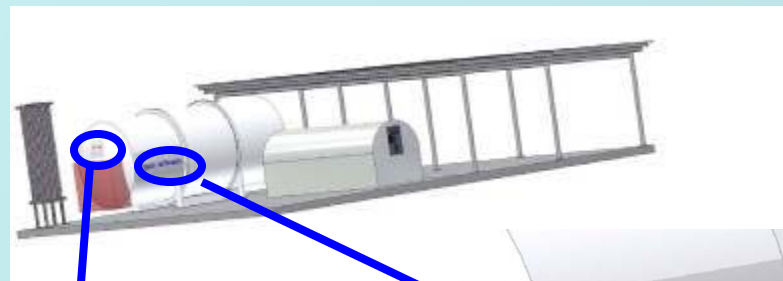
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10/30-12/1/2006

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1008 Physical Security: door locks

- East Control Room double glass doors: doesn't close; hinges are sprung and frame bent; doesn't matter that much because there is no plate over the lock so it can easily be opened with a piece of wire or a penknife.
- Southeast Control Room glass door: no plate over the lock, nice wide gap, easy to open with a wire or a knife.
- East Assembly Hall door: no plate over the lock, also easy to open with a knife.
- Gas Mixing House doors: neither door on the north side has a plate over the lock, so the keypad is extraneous.
- Annex Trailers: no plates over the locks, wider gaps on some than others
- Northeast entrance to tunnel and tech offices is always unlocked; the doors inside aren't too bad, but since you could work on them for an hour without being seen, that would probably let you into the back door of lab area (you need a slightly longer piece of wire to get in there, probably). (That northeast door has had peeling orange paint for years which looks like s#\$%)

Conclusion: the doors are merely suggestions that we don't want people walking through; they wouldn't keep anyone out who wants to get in more than 30 seconds.

Remaining Schedule (cont'd)

	Start	Complete
East carriage roll in & setup		
Prepare IR & EC for move to IR/move cart, manlifts, collars	23-Oct	31-Oct
EC Roll in	1-Nov	3-Nov
Connect EC services	6-Nov	10-Nov
Install EC Ladder	13-Nov	14-Nov
Install EC rear access & ext.	15-Nov	17-Nov
Move MMS full North/Install beam pipe collar	20-Nov	22-Nov
Rebuild Rolling door	27-Nov	30-Nov
Close rolling door	30-Nov	30-Nov
RHIC Cooldown Begins	1-Dec	1-Dec
Pink Sheeting & Blue Sheeting	13-Nov	1-Dec
Start Flammable Gas Flow	5-Dec	18-Dec
All Up Commissioning	5-Dec	18-Dec
Beam in yellow ring	18-Dec	18-Dec
Beam in blue ring	25-Jan	25-Jan
RHIC beam conditioning	25-Jan	31-Dec
Shutdown Concluded/Start of Physics Run	1-Jan	1-Jan



SEU Test

John Lajoie Iowa State

Experimental Impact Statement

- The box dimensions are: 17" x 10" x 3.5".
- The only services required by the box in order to function are AC power and a Cat5 cable connected to the USB interface.
- The FPGA devices will be programmed and monitored over an external USB connection, which is run over a USB -> Cat5 extender box. This extender has a maximum range of 150 feet of Cat5 cable, which should be sufficient to reach from the PHENIX IR to the rack room, where it will connect to a laptop containing the analysis and configuration software. (The laptop will require network access, and will comply fully with all BNL cybersecurity requirements.)
- Because SEU events are relatively rare, it would be best to expose the apparatus to as high a particle flux as possible. However, the box represents a substantial amount of material and it would be unacceptable to place the box within the acceptance of the central arms. Placement within one of the muon arms, near or on the central magnet pole, would be optimal.

SEU Test

John Lajoie Iowa State

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PC HV work Request

- New HV modules on EC & WC,
- Cables and connectors needed.
- Need cables run north to south on EC.
- Manlift needed
- PC guys to be here 10/24 work to be completed by 10/27

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Next Week

- MPC N commissioning
- TOF W & RXNP electronics testing & commissioning
- HBD signal rack chimney
- HBD presurvey, installation, final survey
- HBD & TOF W mixing house gas control systems
- TEC repairs

Bridge Signal Cable trays

TESTING - SUPPORT + NOISE



Where To Find PHENIX Technical Info



Links for the shutdown schedule as well as weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found from the web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm